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THREE FORMICID NAMES WHICH HAVE BEEN OVERLOOKED

Mr. S. A. ROHWER has kindly called my attention to two generic names which have been overlooked by all recent myrmecologists, including Dalla Torre, the author of the "Catalogus Hymenopterorum." One of these names is *Typhlomyrmex*, which was given by Gistel in 1856¹ to *Myrmica typhlops* Lund. On referring to Lund's paper² I find that *M. typhlops* is mentioned without a description, and since the insect is certainly not a *Myrmica* in the modern sense and can not be identified from the few notes on its habits (moving in files and carrying isopods), the name must be regarded as a *nomen nudum* and hence without any standing in nomenclature. And since Gistel cites no characters for his genus *Typhlomyrmex*, but merely bases it on an invalid name, it, too, is without standing. Mayr, without knowing of Gistel's work, described in 1862 a genus *Typhlomyrmex* for a neotropical ant, *T. rogenhoferi* Mayr. A few other species have since been added. It is clear that *Typhlomyrmex* Mayr is valid and not to be replaced by some other name on account of Gistel's *Typhlomyrmex*, which has not even the status of a synonym. More serious is the second case which involves *Polyrhachis*, an important genus comprising some 300 known species of paleotropical ants. The name *Polyrhachis* was first suggested by Shuckard in a volume which he

¹"Mysterien der europäischen Insectenwelt."

²"Lettre sur les Habitudes de Quelques Fourmis du Brésil, adressée a M. Audouin," *Ann. Sci. Nat.*, XXIII., 1831, p. 113-138.

published with Swainson in 1840.³ On page 172 of this work occurs the following sentence: "It is in the first division that we find the stingless genera, namely, *Formica* Linn., *Formicina* Shkd., *Polyergus* Latr., *Polyrhachis* Shkd. and *Dolichoderus* Lund, besides several other yet uncharacterized genera which we shall shortly publish." As Shuckard did not live to give a description of *Polyrhachis* and cites no species as belonging to it, the name is merely a *nomen nudum*. It was, however, either resuscitated or reinvented in 1858 by Frederick Smith.⁴ He described some twenty species of *Polyrhachis*, with Drury's *Formica bihamata* as the designated type. In the same year 1858 Gerstcker⁵ based a genus *Hoplomyrmus* on an African ant, *H. schistaceus* Gerst., which is clearly congeneric with the forms included by Smith in *Polyrhachis*. As Emery has shown,⁶ there is some doubt as to which generic name was first published. Since Smith's paper was read before the Linnean Society in June, 1857, while Gerstcker's was not read before the Berlin Academy till April, 1858, the genus *Polyrhachis* has been given precedence by subsequent writers. Emery has, however, adopted *Hoplomyrmus* as a subgeneric name for a number of species which he groups together as the cohort "*Polyrhachides carinatae*."

Speculation on the validity of *Polyrhachis* and *Hoplomyrmus* loses all its significance in the light of Mr. Rohwer's discovery that Billberg in his "*Enumeratio Insectorum*" published "On the History and Natural Arrangement of Insects," London.

"Catalogue of the Hymenopterous Insects Collected at Sarawak, Borneo; Mount Ophir, Malacca; and at Singapore by A. R. Wallace," *Journ. Proc. Linn. Soc. Zool.*, II., 1858, pp. 42-130, 2 pls.

³ *Monatschr. Akad. Wiss. Berlin*, 1858, p. 262.

⁴ "Saggio di un Catalogo Sistematico dei Generi Camponotus, Polyrhachis e Affini," *Mem. E. Accad. Sci. Ist. Bologna*, 1896, p. 776 nota.

lished in 1820, a work of which there seem to be only two copies in America, one in the Museum of Comparative Zoology, the other in the library of the Boston Society of Natural History, had many years previously established the genus under another name. In this work on p. 104 we find the following:

"G. MYRMA Eg.—*Formica* ol.

Carinata N. Chaled. Fbr.	<i>Hystrix</i> Eg. 2"
militaris Afr. Aequin. —	

The "Eg." in this citation stands for "Billberg." It is clear that this author cites the two valid Fabrician species *Formica carinata* and *militaris* as representatives of a new genus *Myrma* for what was formerly a portion of the genus *Formica* Linn. Both of these species have long been regarded as *bonâ fide* members of the genus *Polyrhachis*, which, as has just been shown, was not established till 1858. The *hystrix* cited by Billberg is a *nomen nudum*, if it be not the *Formica hystrix* of Latreille and Fabricius, which is in turn a synonym of *Atta* (*Acromyrmex*) *octospinosa* Reich. The "Eg." after the name would seem to preclude this latter supposition. Be this as it may, however, there can be no doubt concerning the two other species, one of which, *F. militaris*, may properly be regarded as the type of the genus *Myrma*. This case seems, therefore, to be quite clear and to require, in obedience to our code of zoological nomenclature, the substitution of *Myrma* for *Polyrhachis*. Although this is a deplorable change, owing to the large number of citations of ants under Smith's generic name, there is, nevertheless, a slight gain in brevity and euphony. I would suggest, however, that *Polyrhachis* Smith be retained as a subgeneric name for the type *P. bikamata* Drury and the small cohort of allied species (*bellicosa* F. Smith, *ypsilon* Emery, *craddocki* Bingham and *lamellidens* F. Smith) which Emery calls

Polyrhachides hamatæ. The typical subgenus *Myrma* will replace *Hoplomyrmus*, since its type, *M. militaris*, is closely related to Gerstäcker's *schistacea*.⁷ The species of *Myrma* may then be grouped under several subgenera, names for two of which are here suggested for the first time, as follows:

Genus MYRMA Billberg (1820) = *Polyrhachis* F. Smith (1858).

1. Subgenus: *Campomyrma* subgen. nov.
= Cohors *Polyrhachides camponotiformes* Emery.
Type: *Polyrhachis clypeata* Mayr.
2. Subgenus: *Myrma* Billberg = *Hoplomyrmus* Gerst.
= Cohors *Polyrhachides carinatae* Emery.
Type: *Formica militaris* Fabr.
3. Subgenus: *Polyrhachis* F. Smith.
= Cohors *Polyrhachides hamatæ* Emery.
Type: *Formica bihamata* Drury.
4. Subgenus: *Hagiomyrma* subgen. nov.
= Cohors *Polyrhachides arciferæ* Emery.
Type: *Formica ammon* Fabr.
5. Subgenus: *Hemioptica* Roger.
Type: *Hemioptica scissa* Roger.

A third generic name, *Formicina* Shkd., which has been overlooked, is mentioned in the foregoing citation from the work of Swainson and Shuckard. This citation and the context seem to show that Shuckard accepted *Formica* Linn. in a restricted sense as the equivalent of what we now know as *Camponotus* Mayr., probably with the type *Formica herculeana* Linn., but this is open to doubt since no species is cited. On the same page two well-known ants are mentioned as species of *Formicina*, viz., *F. rufa* Linn. and *F. flava* Fabr. If only the former species had been mentioned, we might have been compelled to change our modern genus *Formica* to *Formicina*, but as Shuckard included also *F. flava* (which is at present *Lasius flavus*) in the same genus, we see that *Formicina* is merely

⁷ According to Emery *schistacea* is merely a subspecies of *militaris*.

a synonym of *Formica* as used by Fabricius and his contemporaries, possibly *minus* the group now known as *Camponotus*. Under the circumstances I can see no reason to replace any of the modern subdivisions of the old Linnean genus *Formica* with *Formicina* Shuckard.

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